

INTERNATIONAL SEARCH REPORT

Inte. onal Application No

PCT/US 00/20577

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04L1/00 H04L27/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04L H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	EP 0 891 060 A (MATSUSHITA ELECTRIC IND CO LTD) 13 January 1999 (1999-01-13) abstract column 9, line 48 -column 10, line 51 ----- -/--	1,2,10, 11,30-33 3-9, 12-18, 34-36

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

5 January 2001

Date of mailing of the international search report

05. 04. 2001

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>SAMPEI S ET AL: "ADAPTIVE MODULATION/TDMA SCHEME FOR PERSONAL MULTI-MEDIA COMMUNICATION SYSTEMS" PROCEEDINGS OF THE GLOBAL TELECOMMUNICATIONS CONFERENCE (GLOBECOM),US,NEW YORK, IEEE, 28 November 1994 (1994-11-28), pages 989-993, XP000488685 ISBN: 0-7803-1821-8 page 989, left-hand column, last paragraph -right-hand column, paragraph 1 page 990, left-hand column, paragraph 1 -right-hand column, paragraph 1; figures 1,2</p> <p style="text-align: center;">---</p>	<p>3-9, 12-18, 34-36</p>
A	<p>TOYOKI UE ET AL: "SYMBOL RATE AND MODULATION LEVEL CONTROLLED ADAPTIVE MODULATION/TDMA/TDD FOR PERSONAL COMMUNICATION SYSTEMS" PROCEEDINGS OF THE VEHICULAR TECHNOLOGY CONFERENCE,US,NEW YORK, IEEE, vol. CONF. 45, 25 July 1995 (1995-07-25), pages 306-310, XP000550184 ISBN: 0-7803-2743-8 abstract page 306, paragraph 3 page 306, right-hand column, last paragraph -page 307, left-hand column, paragraph 4; figure 2</p> <p style="text-align: center;">---</p>	<p>5,14,36</p>
A	<p>EP 0 845 916 A (ERICSSON TELEFON AB L M) 3 June 1998 (1998-06-03)</p> <p>page 4, line 18 - line 20; table 1 page 5, line 39 - line 53</p> <p style="text-align: center;">---</p>	<p>2-4,6-9, 11-13, 15-18, 30-35</p>
A	<p>EP 0 507 384 A (PHILIPS ELECTRONICS UK LTD ;KONINKL PHILIPS ELECTRONICS NV (NL)) 7 October 1992 (1992-10-07) abstract page 2, line 3 - line 10 page 2, line 24 - line 39 page 3, line 1 - line 7 page 3, line 44 -page 4, line 21</p> <p style="text-align: center;">---</p>	<p>1,5,10, 14,30,36</p>
A	<p>WO 92 22162 A (BRITISH TELECOMM) 10 December 1992 (1992-12-10) abstract; figures 1-3,7 page 5, line 16 - line 22 page 11, line 10 - line 34</p> <p style="text-align: center;">-----</p>	<p>1,5,10, 14,30,36</p>

INTERNATIONAL SEARCH REPORT

International application No.
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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-18, 30.36

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-18, 30-36

Transmission method with variable modulation

2. Claims: 19-29

Encoding method

3. Claims: 37-40

Method for setting weights in a FIR filter

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int. Patent Application No

PCT/US 00/20577

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0891060 A	13-01-1999	JP 11032096 A JP 11041310 A CA 2242123 A	02-02-1999 12-02-1999 09-01-1999
EP 0845916 A	03-06-1998	US 5983101 A	09-11-1999
EP 0507384 A	07-10-1992	AU 659140 B AU 1399892 A CA 2064921 A CS 9200969 A DE 69226114 D DE 69226114 T ES 2120983 T HK 1013378 A HU 61860 A JP 5091079 A SG 48070 A US 5369637 A	11-05-1995 08-10-1992 04-10-1992 14-10-1992 13-08-1998 18-02-1999 16-11-1998 07-04-2000 01-03-1993 09-04-1993 17-04-1998 29-11-1994
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